

=&gt; d his nofile

(FILE 'HOME' ENTERED AT 16:16:03 ON 29 JAN 2008)

FILE 'HCAPLUS' ENTERED AT 16:16:17 ON 29 JAN 2008

L1 1 SEA ABB=ON PLU=ON US20060051305/PN  
D IBIB AB IT

FILE 'REGISTRY' ENTERED AT 16:17:17 ON 29 JAN 2008

L2 1 SEA ABB=ON PLU=ON LIGNIN PEROXIDASE/CN  
D RN  
L3 1 SEA ABB=ON PLU=ON 42613-30-9/RN  
L4 1 SEA ABB=ON PLU=ON L2 OR L3  
L5 1 SEA ABB=ON PLU=ON VERATRYL ALCOHOL/CN  
L6 1 SEA ABB=ON PLU=ON 93-03-8/RN  
L7 1 SEA ABB=ON PLU=ON L5 OR L6  
L8 1 SEA ABB=ON PLU=ON HYDROGEN PEROXIDE/CN  
L9 1 SEA ABB=ON PLU=ON 7722-84-1/RN  
L10 1 SEA ABB=ON PLU=ON L8 OR L9  
L11 1 SEA ABB=ON PLU=ON TRANSCUTOL/CN  
L12 1 SEA ABB=ON PLU=ON 111-90-0/RN  
L13 1 SEA ABB=ON PLU=ON L11 OR L12  
L14 3 SEA ABB=ON PLU=ON BUTYLENE GLYCOL/CN  
L15 1 SEA ABB=ON PLU=ON 25265-75-2  
L16 1 SEA ABB=ON PLU=ON MANGANESE PEROXIDE/CN  
L17 1 SEA ABB=ON PLU=ON 101395-74-8/RN  
L18 1 SEA ABB=ON PLU=ON L16 OR L17

FILE 'HCAPLUS' ENTERED AT 16:23:54 ON 29 JAN 2008

L19 1763 SEA ABB=ON PLU=ON L4  
L20 1746 SEA ABB=ON PLU=ON (LIGNIN PEROXIDASE OR LIGNIN PEROXIDASE  
ENZYME#)  
L21 52 SEA ABB=ON PLU=ON LIGNIN (W)MODIF? ENZYME OR LIGNIN MODIF?  
(W)ENZYME  
L22 0 SEA ABB=ON PLU=ON LIGNIN OXIDOREDUCTASE  
L23 38 SEA ABB=ON PLU=ON ISOENZYME (W) (H1 OR H2)  
L24 1159 SEA ABB=ON PLU=ON L7  
L25 671 SEA ABB=ON PLU=ON L24 AND VERATRYL ALCOHOL  
L26 107664 SEA ABB=ON PLU=ON L10  
L27 101674 SEA ABB=ON PLU=ON L10 AND HYDROGEN PEROXIDE  
L28 52 SEA ABB=ON PLU=ON L18  
L29 51 SEA ABB=ON PLU=ON L28 AND MANGANESE PEROXIDE  
L30 3621 SEA ABB=ON PLU=ON L13  
L31 380 SEA ABB=ON PLU=ON L13 AND TRANSCUTOL  
L32 11695 SEA ABB=ON PLU=ON BUTYLENE GLYCOL OR L15  
L33 12051 SEA ABB=ON PLU=ON L31 OR L32  
L34 101719 SEA ABB=ON PLU=ON L27 OR L29  
L35 2216 SEA ABB=ON PLU=ON L19 OR L20 OR L21 OR L23  
L36 3709 SEA ABB=ON PLU=ON (SKIN# OR SKIN CELL# OR SKIN CELL PIGMENT?  
OR HAIR) (2A) LIGHTEN?  
L37 8956 SEA ABB=ON PLU=ON (SKIN# OR SKIN CELL# OR HAIR) (L)  
PENETRAT?  
L38 145408 SEA ABB=ON PLU=ON TOPICAL OR TRANSERM? OR EPIDERM?  
L39 8036 SEA ABB=ON PLU=ON HAIR (2A) (DYE OR DYING OR COLOR?)  
L40 1 SEA ABB=ON PLU=ON PIGMENT? OXIDAT? (2A) (HAIR OR HAIR CELL#)

E HAIR PREPARATIONS/CT

E E3+ALL

L41 19579 SEA ABB=ON PLU=ON "HAIR PREPARATIONS"+OLD/CT

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E OXIDATION/CT
E E3+ALL
L42      248316 SEA ABB=ON PLU=ON (OXIDATION/CT OR "OXIDATION (L) BIOCHEM." /C
T OR "OXIDATION (L) BIOL." /CT)
L43      310 SEA ABB=ON PLU=ON PIGMENT? (L) L42
E COSMETICS/CT
E E3+ALL
L44      58599 SEA ABB=ON PLU=ON (COSMETICS/CT OR "COSMETICS AND PERSONAL
CARE PRODUCTS" /CT)
L45      3555 SEA ABB=ON PLU=ON SKIN LIGHTEN?
L46      40 SEA ABB=ON PLU=ON HAIR LIGHTEN?
L47      1389 SEA ABB=ON PLU=ON L35 (L) (PCP OR COS OR BIOL OR PROC) /RL
L48      1 SEA ABB=ON PLU=ON L47 AND (L36 OR L37)
L49      1 SEA ABB=ON PLU=ON L47 AND (L45 OR L46)
L50      0 SEA ABB=ON PLU=ON L47 AND (L40 OR L43)
L51      0 SEA ABB=ON PLU=ON L47 AND L39
L52      1 SEA ABB=ON PLU=ON L47 AND L41
L53      57 SEA ABB=ON PLU=ON L47 AND L42
L54      1 SEA ABB=ON PLU=ON L53 AND L44
L55      1 SEA ABB=ON PLU=ON L35 AND (L36 OR L37)
L56      1 SEA ABB=ON PLU=ON L35 AND (L45 OR L46)
L57      3 SEA ABB=ON PLU=ON L35 AND L44
D SCAN TI HIT
D SCAN L48
L58      0 SEA ABB=ON PLU=ON L35 AND (L43 OR L40)
L59      3 SEA ABB=ON PLU=ON L35 AND L38
D TI 1-3
D TI KWIC 1-3
L60      3 SEA ABB=ON PLU=ON (L48 OR L49) OR L52 OR (L54 OR L55 OR L56
OR L57)
L61      36 SEA ABB=ON PLU=ON PENETRANT (5W) (HAIR OR SKIN)
L62      0 SEA ABB=ON PLU=ON L61 AND L35
L63      146 SEA ABB=ON PLU=ON PIGMENT OXIDAT?
L64      0 SEA ABB=ON PLU=ON L35 AND L63
L65      114264 SEA ABB=ON PLU=ON (L25 OR L34 OR L33)
L66      412 SEA ABB=ON PLU=ON L65 (L) L35
L67      1 SEA ABB=ON PLU=ON L66 AND ((L36 OR L37 OR L38 OR L39 OR
L40))
L68      1 SEA ABB=ON PLU=ON L66 AND (L43 OR L45 OR L46 OR L61 OR L63)
L69      1 SEA ABB=ON PLU=ON L67 OR L68
L70      3 SEA ABB=ON PLU=ON L69 OR L57
SAVE TEMP L70 SRI778HCAP/A
L71      16 SEA ABB=ON PLU=ON BELINKY P?/AU
L72      8 SEA ABB=ON PLU=ON LASSER H?/AU
L73      76 SEA ABB=ON PLU=ON DOSORETZ C?/AU
L74      91 SEA ABB=ON PLU=ON (L71 OR L72 OR L73)
L75      32 SEA ABB=ON PLU=ON L74 AND L35
L76      1 SEA ABB=ON PLU=ON L75 AND (L45 OR L46)
L77      0 SEA ABB=ON PLU=ON L75 AND L39
SAVE TEMP L76 SRI778HCAIN/A

FILE 'BIOSIS, BIOTECHNO, SCISEARCH' ENTERED AT 16:56:13 ON 29 JAN 2008
L78      3312 SEA ABB=ON PLU=ON L20 OR L21 OR L23
L79      0 SEA ABB=ON PLU=ON L78 AND (L36 OR L37)
L80      0 SEA ABB=ON PLU=ON L78 AND (L45 OR L46)
L81      0 SEA ABB=ON PLU=ON L78 AND L39
L82      0 SEA ABB=ON PLU=ON L78 AND (L40 OR L43)
L83      0 SEA ABB=ON PLU=ON L76
L84      0 SEA ABB=ON PLU=ON (L79 OR L80 OR L81)

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## \*\*\*\*\* INVENTOR RESULTS \*\*\*\*\*

=&gt; d his 176

(FILE 'HCAPLUS' ENTERED AT 16:23:54 ON 29 JAN 2008)

L76 1 S L75 AND (L45 OR L46)

=> d que 176

L2	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	LIGNIN PEROXIDASE/CN
L3	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	42613-30-9/RN
L4	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	L2 OR L3
L19	1763	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L4
L20	1746	SEA FILE=HCAPLUS ABB=ON	PLU=ON	(LIGNIN PEROXIDASE OR LIGNIN PEROXIDASE ENZYME#)
L21	52	SEA FILE=HCAPLUS ABB=ON	PLU=ON	LIGNIN (W)MODIF? ENZYME OR LIGNIN MODIF? (W)ENZYME
L23	38	SEA FILE=HCAPLUS ABB=ON	PLU=ON	ISOENZYME (W) (H1 OR H2)
L35	2216	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L19 OR L20 OR L21 OR L23
L45	3555	SEA FILE=HCAPLUS ABB=ON	PLU=ON	SKIN LIGHTEN?
L46	40	SEA FILE=HCAPLUS ABB=ON	PLU=ON	HAIR LIGHTEN?
L71	16	SEA FILE=HCAPLUS ABB=ON	PLU=ON	BELINKY P?/AU
L72	8	SEA FILE=HCAPLUS ABB=ON	PLU=ON	LASSER H?/AU
L73	76	SEA FILE=HCAPLUS ABB=ON	PLU=ON	DOSORETZ C?/AU
L74	91	SEA FILE=HCAPLUS ABB=ON	PLU=ON	(L71 OR L72 OR L73)
L75	32	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L74 AND L35
L76	1	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L75 AND (L45 OR L46)

=&gt; d his 183

(FILE 'BIOSIS, BIOTECHNO, SCISEARCH' ENTERED AT 16:56:13 ON 29 JAN 2008)

L83 0 S L76

=> d que 183

L2	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	LIGNIN PEROXIDASE/CN
L3	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	42613-30-9/RN
L4	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	L2 OR L3
L19	1763	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L4
L20	1746	SEA FILE=HCAPLUS ABB=ON	PLU=ON	(LIGNIN PEROXIDASE OR LIGNIN PEROXIDASE ENZYME#)
L21	52	SEA FILE=HCAPLUS ABB=ON	PLU=ON	LIGNIN (W)MODIF? ENZYME OR LIGNIN MODIF? (W)ENZYME
L23	38	SEA FILE=HCAPLUS ABB=ON	PLU=ON	ISOENZYME (W) (H1 OR H2)
L35	2216	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L19 OR L20 OR L21 OR L23
L45	3555	SEA FILE=HCAPLUS ABB=ON	PLU=ON	SKIN LIGHTEN?
L46	40	SEA FILE=HCAPLUS ABB=ON	PLU=ON	HAIR LIGHTEN?
L71	16	SEA FILE=HCAPLUS ABB=ON	PLU=ON	BELINKY P?/AU
L72	8	SEA FILE=HCAPLUS ABB=ON	PLU=ON	LASSER H?/AU
L73	76	SEA FILE=HCAPLUS ABB=ON	PLU=ON	DOSORETZ C?/AU
L74	91	SEA FILE=HCAPLUS ABB=ON	PLU=ON	(L71 OR L72 OR L73)
L75	32	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L74 AND L35
L76	1	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L75 AND (L45 OR L46)
L83	0	SEA L76		

=&gt; d 176 ibib ab

L76 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:513473 HCAPLUS Full-text

DOCUMENT NUMBER: 141:59251  
 TITLE: Methods of producing lignin peroxidase and its use in skin and hair lightening  
 INVENTOR(S): Beilinky, Paula; Lasser, Haim; Dosoretz, Carlos  
 PATENT ASSIGNEE(S): R.B.T (Rakuto Bio Technologies) Ltd., Israel  
 SOURCE: PCT Int. Appl., 71 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004052275	A2	20040624	WO 2003-IL1055	20031211
WO 2004052275	A3	20040930		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003286410	A1	20040630	AU 2003-286410	20031211
EP 1583512	A2	20051012	EP 2003-777155	20031211
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
CN 1747712	A	20060315	CN 2003-80109673	20031211
JP 2006514943	T	20060518	JP 2004-558336	20031211
US 2006051305	A1	20060309	US 2005-538778	20050610
IN 2005CN01543	A	20070223	IN 2005-CN1543	20050707
PRIORITY APPLN. INFO.:			US 2002-432678P	P 20021212
			WO 2003-IL1055	W 20031211

AB Methods of producing lignin peroxidase (LIP) are provided. Also provided are methods and cosmetic compns. suitable for skin and hair lightening as well as kits and an article-of-manufacturing including active ingredients for skin and hair lightening. Examples are given for purification of LIP from Phanerochaete chrysosporium, optimization of melanin in an aqueous phase oxidation using purified LIP, and in vivo skin and hair lightening by purified LIP H1 isoenzyme in a cream formulation.

\*\*\*\*\* QUERY RESULTS \*\*\*\*\*

=&gt; d his 170

(FILE 'HCAPLUS' ENTERED AT 16:23:54 ON 29 JAN 2008)

L70 3 S L69 OR L57

=&gt; d que 170

L2	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	LIGNIN PEROXIDASE/CN
L3	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	42613-30-9/RN
L4	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	L2 OR L3
L5	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	VERATRYL ALCOHOL/CN
L6	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	93-03-8/RN
L7	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	L5 OR L6
L8	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	HYDROGEN PEROXIDE/CN
L9	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	7722-84-1/RN
L10	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	L8 OR L9
L11	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	TRANSCUTOL/CN
L12	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	111-90-0/RN
L13	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	L11 OR L12
L15	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	25265-75-2
L16	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	MANGANESE PEROXIDE/CN
L17	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	101395-74-8/RN
L18	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	L16 OR L17
L19	1763	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L4
L20	1746	SEA FILE=HCAPLUS ABB=ON	PLU=ON	(LIGNIN PEROXIDASE OR LIGNIN PEROXIDASE ENZYME#)
L21	52	SEA FILE=HCAPLUS ABB=ON	PLU=ON	LIGNIN (W)MODIF? ENZYME OR LIGNIN MODIF? (W)ENZYME
L23	38	SEA FILE=HCAPLUS ABB=ON	PLU=ON	ISOENZYME (W) (H1 OR H2)
L24	1159	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L7
L25	671	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L24 AND VERATRYL ALCOHOL
L27	101674	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L10 AND HYDROGEN PEROXIDE
L28	52	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L18
L29	51	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L28 AND MANGANESE PEROXIDE
L31	380	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L13 AND TRANSCUTOL
L32	11695	SEA FILE=HCAPLUS ABB=ON	PLU=ON	BUTYLENE GLYCOL OR L15
L33	12051	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L31 OR L32
L34	101719	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L27 OR L29
L35	2216	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L19 OR L20 OR L21 OR L23
L36	3709	SEA FILE=HCAPLUS ABB=ON	PLU=ON	(SKIN# OR SKIN CELL# OR SKIN CELL PIGMENT? OR HAIR) (2A) LIGHTEN?
L37	8956	SEA FILE=HCAPLUS ABB=ON	PLU=ON	(SKIN# OR SKIN CELL# OR HAIR) (L) PENETRAT?
L38	145408	SEA FILE=HCAPLUS ABB=ON	PLU=ON	TOPICAL OR TRANSDERM? OR EPIDERM?
L39	8036	SEA FILE=HCAPLUS ABB=ON	PLU=ON	HAIR (2A) (DYE OR DYING OR COLOR?)
L40	1	SEA FILE=HCAPLUS ABB=ON	PLU=ON	PIGMENT? OXIDAT? (2A) (HAIR OR HAIR CELL#)
L42	248316	SEA FILE=HCAPLUS ABB=ON	PLU=ON	(OXIDATION/CT OR "OXIDATION (L) BIOCHEM."/CT OR "OXIDATION (L) BIOL."/CT)
L43	310	SEA FILE=HCAPLUS ABB=ON	PLU=ON	PIGMENT? (L) L42
L44	58599	SEA FILE=HCAPLUS ABB=ON	PLU=ON	(COSMETICS/CT OR "COSMETICS AND PERSONAL CARE PRODUCTS"/CT)
L45	3555	SEA FILE=HCAPLUS ABB=ON	PLU=ON	SKIN LIGHTEN?
L46	40	SEA FILE=HCAPLUS ABB=ON	PLU=ON	HAIR LIGHTEN?
L57	3	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L35 AND L44
L61	36	SEA FILE=HCAPLUS ABB=ON	PLU=ON	PENETRANT (5W) (HAIR OR SKIN)

L63 146 SEA FILE=HCAPLUS ABB=ON PLU=ON PIGMENT OXIDAT?  
 L65 114264 SEA FILE=HCAPLUS ABB=ON PLU=ON (L25 OR L34 OR L33)  
 L66 412 SEA FILE=HCAPLUS ABB=ON PLU=ON L65 (L) L35  
 L67 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L66 AND ((L36 OR L37 OR L38  
 OR L39 OR L40))  
 L68 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L66 AND (L43 OR L45 OR L46 OR  
 L61 OR L63)  
 L69 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L67 OR L68  
 L70 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L69 OR L57

=> d his l84

(FILE 'BIOSIS, BIOTECHNO, SCISEARCH' ENTERED AT 16:56:13 ON 29 JAN 2008)  
 L84 0 S L79-L81

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L20 1746 SEA FILE=HCAPLUS ABB=ON PLU=ON (LIGNIN PEROXIDASE OR LIGNIN  
 PEROXIDASE ENZYME#)  
 L21 52 SEA FILE=HCAPLUS ABB=ON PLU=ON LIGNIN (W)MODIF? ENZYME OR  
 LIGNIN MODIF? (W)ENZYME  
 L23 38 SEA FILE=HCAPLUS ABB=ON PLU=ON ISOENZYME (W) (H1 OR H2)  
 L36 3709 SEA FILE=HCAPLUS ABB=ON PLU=ON (SKIN# OR SKIN CELL# OR SKIN  
 CELL PIGMENT? OR HAIR) (2A) LIGHTEN?  
 L37 8956 SEA FILE=HCAPLUS ABB=ON PLU=ON (SKIN# OR SKIN CELL# OR  
 HAIR) (L) PENETRAT?  
 L39 8036 SEA FILE=HCAPLUS ABB=ON PLU=ON HAIR (2A) (DYE OR DYING OR  
 COLOR?)  
 L45 3555 SEA FILE=HCAPLUS ABB=ON PLU=ON SKIN LIGHTEN?  
 L46 40 SEA FILE=HCAPLUS ABB=ON PLU=ON HAIR LIGHTEN?  
 L78 3312 SEA L20 OR L21 OR L23  
 L79 0 SEA L78 AND (L36 OR L37)  
 L80 0 SEA L78 AND (L45 OR L46)  
 L81 0 SEA L78 AND L39  
 L84 0 SEA (L79 OR L80 OR L81)

=> d l70 1-3 ibib ed ab hitind

L70 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2008 ACS ON STN  
 ACCESSION NUMBER: 2006:908269 HCAPLUS Full-text  
 DOCUMENT NUMBER: 145:298820  
 TITLE: Composition for decoloring melanin for improving  
 freckle  
 INVENTOR(S): Kim, Eun Ki  
 PATENT ASSIGNEE(S): Inha University, S. Korea  
 SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given  
 CODEN: KRXXA7  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Korean  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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KR 2005041181	A	20050504	KR 2003-76245	20031030
PRIORITY APPLN. INFO.:			KR 2003-76245	20031030
ED Entered STN: 06 Sep 2006				

AB A composition for decoloring melanin being capable of using whitening material of functional cosmetics, being useful for materials improving diseases such as freckling and so on is provided. The composition for decoloring melanin contains: one or more mediators selected from a group comprising TBHQ (tert-butylhydroquinone), vitamin C, sodium ascorbyl phosphate, magnesium ascorbyl phosphate, kojic acid, licorice extract and arbutin, hydroquinone- $\beta$ -glucopyranoside; pne or more enzyme decoloring melanins selected from a group comprising laccase, lignin peroxidase, manganese peroxidase, horseradish peroxidase and sweet potato peroxidase as effective component.

IC ICM A61K007-48

CC 62-4 (Essential Oils and Cosmetics)

IT Cosmetics  
(composition for decoloring melanin and lightening freckles)

IT 9003-99-0, Peroxidase 42613-30-9, Lignin  
peroxidase 80498-15-3, Laccase 114995-15-2, Manganese  
peroxidase  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(composition for decoloring melanin and lightening freckles)

L70 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:513473 HCAPLUS Full-text

DOCUMENT NUMBER: 141:59251

TITLE: Methods of producing lignin  
peroxidase and its use in skin and  
hair lightening

INVENTOR(S): Belinky, Paula; Lasser, Haim; Dosoretz, Carlos

PATENT ASSIGNEE(S): R.B.T (Rakuto Bio Technologies) Ltd., Israel

SOURCE: PCT Int. Appl., 71 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004052275	A2	20040624	WO 2003-111055	20031211
WO 2004052275	A3	20040930		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003286410	A1	20040630	AU 2003-286410	20031211
EP 1583512	A2	20051012	EP 2003-777155	20031211
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
CN 1747712	A	20060315	CN 2003-80109673	20031211
JP 2006514943	T	20060518	JP 2004-558336	20031211
US 2006051305	A1	20060309	US 2005-538778	20050610
IN 2005CN01543	A	20070223	IN 2005-CN1543	20050707
PRIORITY APPLN. INFO.:			US 2002-432678P	P 20021212
			WO 2003-111055	W 20031211

ED Entered STN: 25 Jun 2004

- AB Methods of producing lignin peroxidase (LIP) are provided. Also provided are methods and cosmetic compns. suitable for skin and hair lightening as well as kits and an article-of-manufacturing including active ingredients for skin and hair lightening. Examples are given for purification of LIP from *Phanerochaete chrysosporium*, optimization of melanin in an aqueous phase oxidation using purified LIP, and in vivo skin and hair lightening by purified LIP H1 isoenzyme in a cream formulation.
- IC ICM A61K
- CC 62-4 (Essential Oils and Cosmetics)  
Section cross-reference(s): 16
- ST lignin peroxidase purifn skin hair  
lightening
- IT Hair preparations  
Oxidation  
*Phanerochaete chrysosporium*  
(producing lignin peroxidase and its use in  
skin and hair lightening)
- IT Amines, biological studies  
RL: COS (Cosmetic use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)  
(producing lignin peroxidase and its use in  
skin and hair lightening)
- IT Cosmetics  
(skin-lightening; producing lignin  
peroxidase and its use in skin and hair  
lightening)
- IT 9005-53-2, Lignin, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(-modifying enzymes; producing lignin peroxidase  
and its use in skin and hair lightening)
- IT 42613-30-9P, Lignin peroxidase  
RL: BCP (Biochemical process); COS (Cosmetic use); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(isoenzymes H1 or H21; producing lignin  
peroxidase and its use in skin and hair  
lightening)
- IT 56-81-5, Glycerol, processes 7722-84-1, Hydrogen  
peroxide, processes  
RL: BCP (Biochemical process); BIOL (Biological study); PROC (Process)  
(producing lignin peroxidase and its use in  
skin and hair lightening)
- IT 111-90-0, Transcitol 25265-75-2,  
Butylene glycol  
RL: COS (Cosmetic use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)  
(producing lignin peroxidase and its use in  
skin and hair lightening)

L70 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2001:798405 HCAPLUS Full-text

DOCUMENT NUMBER: 135:340845

TITLE: Enzyme variants with decreased immunogenicity having  
one or more D-amino acid substitutions and their use  
in cleaning and personal care compositions

INVENTOR(S): Weisgerber, David John

PATENT ASSIGNEE(S): Procter + Gamble Company, USA

SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent



LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001081556	A2	200111101	WO 2001-US13061	20010423
WO 2001081556	A3	20020718		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 2003170846	A1	20030911	US 2001-824607	20010402
EP 1276871	A2	20030122	EP 2001-928770	20010423
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
JP 2003530881	T	20031021	JP 2001-578627	20010423
MX 2002PA10469	A	20030425	MX 2002-PA10469	20021023
PRIORITY APPLN. INFO.:			US 2000-199415P	P 20000424
			WO 2001-US13061	W 20010423

ED Entered STN: 02 Nov 2001

AB The present invention relates to enzyme variants having decreased immunogenicity relative to their corresponding wild-type enzymes. More particularly, the present invention relates to enzyme variants having a modified amino acid sequence of a wild-type amino acid sequence, wherein the modified amino acid sequence comprises a substitution of one or more amino acid positions with at least one D-amino acid. The invention further relates to mutant genes encoding such enzyme variants and cleaning and personal care compns. comprising such enzyme variants.

ICM C12N009-00

CC 7-5 (Enzymes)

Section cross-reference(s): 3, 46, 62

IT Cosmetics

(cleansing; enzyme variants with decreased immunogenicity having D-amino acid substitutions and their use in cleaning and personal care compns.)

IT Bath preparations

Cosmetics

Epitopes

Mutagenesis

Protein engineering

(enzyme variants with decreased immunogenicity having D-amino acid substitutions and their use in cleaning and personal care compns.)

IT Cosmetics

(moisturizers; enzyme variants with decreased immunogenicity having D-amino acid substitutions and their use in cleaning and personal care compns.)

IT 9000-92-4P, Amylase 9001-54-1P, Hyaluronidase 9001-62-1P, Lipase 9001-92-7P, Protease 9002-10-2P, Phenoloxidase 9003-99-0P, Peroxidase 9012-54-8P, Cellulase 9013-19-8P, Isomerase 9013-79-0P, Esterase 9013-93-8P, Phospholipase 9025-56-3P, Hemicellulase 9025-71-2P, Tannase 9029-60-1P, Lipoxigenase 9031-56-5P, Ligase 9032-75-1P, Pectinase 9035-73-8P, Oxidase 9037-80-3P, Reductase 9047-61-4P, Transferase 9055-04-3P, Lyase 9067-74-7P, Arabinosidase 9068-42-2P, Pentosanase 9074-98-0P,  $\beta$ -Glucanase 9075-68-7P, Pullulanase

# 10/538778

37259-58-8P, Serine protease 37278-89-0P, Xylanase 37326-33-3P,  
 Chondroitinase 37341-53-0P, Keratinase 39450-01-6P, Proteinase K  
 42613-30-9P, Ligninase 51377-41-4P, Cutinase 69772-87-8P,  
 Thermitase 80498-15-3P, Laccase  
 RL: BPN (Biosynthetic preparation); BUU (Biological use, unclassified);  
 NUU (Other use, unclassified); PRP (Properties); BIOL (Biological study);  
 PREP (Preparation); USES (Uses)  
 (enzyme variants with decreased immunogenicity having D-amino acid  
 substitutions and their use in cleaning and personal care compns.)

=> d his nofile

(FILE 'HOME' ENTERED AT 16:16:03 ON 29 JAN 2008)

FILE 'HCAPLUS' ENTERED AT 16:16:17 ON 29 JAN 2008

L1 1 SEA ABB=ON PLU=ON US20060051305/PN  
D IBIB AB IT

FILE 'REGISTRY' ENTERED AT 16:17:17 ON 29 JAN 2008

L2 1 SEA ABB=ON PLU=ON LIGNIN PEROXIDASE/CN  
D RN  
L3 1 SEA ABB=ON PLU=ON 42613-30-9/RN  
L4 1 SEA ABB=ON PLU=ON L2 OR L3  
L5 1 SEA ABB=ON PLU=ON VERATRYL ALCOHOL/CN  
L6 1 SEA ABB=ON PLU=ON 93-03-8/RN  
L7 1 SEA ABB=ON PLU=ON L5 OR L6  
L8 1 SEA ABB=ON PLU=ON HYDROGEN PEROXIDE/CN  
L9 1 SEA ABB=ON PLU=ON 7722-84-1/RN  
L10 1 SEA ABB=ON PLU=ON L8 OR L9  
L11 1 SEA ABB=ON PLU=ON TRANSCUTOL/CN  
L12 1 SEA ABB=ON PLU=ON 111-90-0/RN  
L13 1 SEA ABB=ON PLU=ON L11 OR L12  
L14 3 SEA ABB=ON PLU=ON BUTYLENE GLYCOL/CN  
L15 1 SEA ABB=ON PLU=ON 25265-75-2  
L16 1 SEA ABB=ON PLU=ON MANGANESE PEROXIDE/CN  
L17 1 SEA ABB=ON PLU=ON 101395-74-8/RN  
L18 1 SEA ABB=ON PLU=ON L16 OR L17

FILE 'HCAPLUS' ENTERED AT 16:23:54 ON 29 JAN 2008

L19 1763 SEA ABB=ON PLU=ON L4  
L20 1746 SEA ABB=ON PLU=ON (LIGNIN PEROXIDASE OR LIGNIN PEROXIDASE  
ENZYME#)  
L21 52 SEA ABB=ON PLU=ON LIGNIN (W)MODIF? ENZYME OR LIGNIN MODIF?  
(W)ENZYME  
L22 0 SEA ABB=ON PLU=ON LIGNIN OXIDOREDUCTASE  
L23 38 SEA ABB=ON PLU=ON ISOENZYME (W) (H1 OR H2)  
L24 1159 SEA ABB=ON PLU=ON L7  
L25 671 SEA ABB=ON PLU=ON L24 AND VERATRYL ALCOHOL  
L26 107664 SEA ABB=ON PLU=ON L10  
L27 101674 SEA ABB=ON PLU=ON L10 AND HYDROGEN PEROXIDE  
L28 52 SEA ABB=ON PLU=ON L18  
L29 51 SEA ABB=ON PLU=ON L28 AND MANGANESE PEROXIDE  
L30 3621 SEA ABB=ON PLU=ON L13  
L31 380 SEA ABB=ON PLU=ON L13 AND TRANSCUTOL  
L32 11695 SEA ABB=ON PLU=ON BUTYLENE GLYCOL OR L15  
L33 12051 SEA ABB=ON PLU=ON L31 OR L32  
L34 101719 SEA ABB=ON PLU=ON L27 OR L29  
L35 2216 SEA ABB=ON PLU=ON L19 OR L20 OR L21 OR L23  
L36 3709 SEA ABB=ON PLU=ON (SKIN# OR SKIN CELL# OR SKIN CELL PIGMENT?  
OR HAIR) (2A) LIGHTEN?  
L37 8956 SEA ABB=ON PLU=ON (SKIN# OR SKIN CELL# OR HAIR) (L)  
PENETRAT?  
L38 145408 SEA ABB=ON PLU=ON TOPICAL OR TRANSERM? OR EPIDERM?  
L39 8036 SEA ABB=ON PLU=ON HAIR (2A) (DYE OR DYING OR COLOR?)  
L40 1 SEA ABB=ON PLU=ON PIGMENT? OXIDAT? (2A) (HAIR OR HAIR CELL#)

E HAIR PREPARATIONS/CT  
E E3+ALL

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L41      19579 SEA ABB=ON  PLU=ON  "HAIR PREPARATIONS"+OLD/CT
          E OXIDATION/CT
          E E3+ALL
L42      248316 SEA ABB=ON  PLU=ON  (OXIDATION/CT OR "OXIDATION (L) BIOCHEM." /C
          T OR "OXIDATION (L) BIOL." /CT)
L43      310 SEA ABB=ON  PLU=ON  PIGMENT? (L) L42
          E COSMETICS/CT
          E E3+ALL
L44      58599 SEA ABB=ON  PLU=ON  (COSMETICS/CT OR "COSMETICS AND PERSONAL
          CARE PRODUCTS" /CT)
L45      3555 SEA ABB=ON  PLU=ON  SKIN LIGHTEN?
L46      40 SEA ABB=ON  PLU=ON  HAIR LIGHTEN?
L47      1389 SEA ABB=ON  PLU=ON  L35 (L) (PCP OR COS OR BIOL OR PROC) /RL
L48      1 SEA ABB=ON  PLU=ON  L47 AND (L36 OR L37)
L49      1 SEA ABB=ON  PLU=ON  L47 AND (L45 OR L46)
L50      0 SEA ABB=ON  PLU=ON  L47 AND (L40 OR L43)
L51      0 SEA ABB=ON  PLU=ON  L47 AND L39
L52      1 SEA ABB=ON  PLU=ON  L47 AND L41
L53      57 SEA ABB=ON  PLU=ON  L47 AND L42
L54      1 SEA ABB=ON  PLU=ON  L53 AND L44
L55      1 SEA ABB=ON  PLU=ON  L35 AND (L36 OR L37)
L56      1 SEA ABB=ON  PLU=ON  L35 AND (L45 OR L46)
L57      3 SEA ABB=ON  PLU=ON  L35 AND L44
          D SCAN TI HIT
          D SCAN L48
L58      0 SEA ABB=ON  PLU=ON  L35 AND (L43 OR L40)
L59      3 SEA ABB=ON  PLU=ON  L35 AND L38
          D TI 1-3
          D TI KWIC 1-3
L60      3 SEA ABB=ON  PLU=ON  (L48 OR L49) OR L52 OR (L54 OR L55 OR L56
          OR L57)
L61      36 SEA ABB=ON  PLU=ON  PENETRANT (5W) (HAIR OR SKIN)
L62      0 SEA ABB=ON  PLU=ON  L61 AND L35
L63      146 SEA ABB=ON  PLU=ON  PIGMENT OXIDAT?
L64      0 SEA ABB=ON  PLU=ON  L35 AND L63
L65      114264 SEA ABB=ON  PLU=ON  (L25 OR L34 OR L33)
L66      412 SEA ABB=ON  PLU=ON  L65 (L) L35
L67      1 SEA ABB=ON  PLU=ON  L66 AND ((L36 OR L37 OR L38 OR L39 OR
          L40))
L68      1 SEA ABB=ON  PLU=ON  L66 AND (L43 OR L45 OR L46 OR L61 OR L63)
L69      1 SEA ABB=ON  PLU=ON  L67 OR L68
L70      3 SEA ABB=ON  PLU=ON  L69 OR L57
          SAVE TEMP L70 SRI778HCAP/A
L71      16 SEA ABB=ON  PLU=ON  BELINKY P?/AU
L72      8 SEA ABB=ON  PLU=ON  LASSER H?/AU
L73      76 SEA ABB=ON  PLU=ON  DOSORETZ C?/AU
L74      91 SEA ABB=ON  PLU=ON  (L71 OR L72 OR L73)
L75      32 SEA ABB=ON  PLU=ON  L74 AND L35
L76      1 SEA ABB=ON  PLU=ON  L75 AND (L45 OR L46)
L77      0 SEA ABB=ON  PLU=ON  L75 AND L39
          SAVE TEMP L76 SRI778HCAIN/A

FILE 'BIOSIS, BIOTECHNO, SCISEARCH' ENTERED AT 16:56:13 ON 29 JAN 2008
L78      3312 SEA ABB=ON  PLU=ON  L20 OR L21 OR L23
L79      0 SEA ABB=ON  PLU=ON  L78 AND (L36 OR L37)
L80      0 SEA ABB=ON  PLU=ON  L78 AND (L45 OR L46)
L81      0 SEA ABB=ON  PLU=ON  L78 AND L39
L82      0 SEA ABB=ON  PLU=ON  L78 AND (L40 OR L43)
L83      0 SEA ABB=ON  PLU=ON  L76
L84      0 SEA ABB=ON  PLU=ON  (L79 OR L80 OR L81)

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FILE 'STNGUIDE' ENTERED AT 17:01:24 ON 29 JAN 2008

D QUE L76

D QUE L83

FILE 'HCAPLUS' ENTERED AT 17:03:02 ON 29 JAN 2008

D L76 IBIB AB

FILE 'STNGUIDE' ENTERED AT 17:03:03 ON 29 JAN 2008

D QUE L70

D QUE L84

FILE 'HCAPLUS' ENTERED AT 17:03:42 ON 29 JAN 2008

D L70 1-3 IBIB ED AB HITIND

FILE 'STNGUIDE' ENTERED AT 17:03:42 ON 29 JAN 2008